Program for Arctic Regional Climate Assessment (PARCA) 2020 Meeting

Date Thursday, 20 February 2020
Time 8:30am – 5:00pm EST (GMT –5)
Location NASA Goddard Space Flight Center, Building 34, Room W150 (ground floor, west side)
Information https://earth.gsfc.nasa.gov/cryo/events/parca20
Live stream NASA UStream

0830–1030		**Morning session #1: Updates on major Arctic research activities**	
Start time	*Length (minutes)*	*Presenter*	*Title*
0830	5	Joe MacGregor	Welcome and announcements
0835	5	Jim Irons	Welcome to NASA Goddard Earth Sciences
0840	20	Thorsten Markus	NASA HQ Cryospheric Sciences
0900	15	Tom Neumann	ICESat-2 Mission Overview and Status
0915	15	Marc Stieglitz	The State of NSF Arctic Research
0930	15	Malte Nordmann Winther	Greenland GNSS Network (GNET)
1000	15	Robin Bell	Greenland Rising: Connecting Changing Ice and Changing Coastlines
1015	15	TBD	Discussion

1030–1100	**Break**

1100–1230		**Morning session #2: Ongoing changes in outlet glaciers**	
1100	15	Michaela King	Dynamic ice loss from the Greenland Ice Sheet driven by sustained glacier retreat
1115	15	Michael Wood	Dynamic elevation change on Greenland glaciers 2016-2019 revealed by NASA's GLISTIN-A radar interferometer
1130	15	Saurabh Vijay	Ice velocity changes of Greenland's marine-terminating glaciers
1145	15	Alexandra Boghosian	The Petermann Ice Shelf Estuary and its impact on ice-sheet stability
1200	15	Allison Chartrand	Variable basal channel evolution from high resolution surface elevation measurements
1215	15	TBD	Discussion

1230–1330	**Lunch**

1330–1500	**Afternoon session #1: Inland surveys and discoveries**

1330	15	Bea Csatho	Twenty-five years of Greenland elevation and mass changes from fusing NASA's laser altimetry record with SMB and FDM models
1345	15	Santiago de la Peña	Continuous measurements of firn-induced elevation changes and surface mass balance in the interior of Greenland and Antarctica in support for altimetry
1400	15	Winnie Chu	Decadal changes in Greenland subglacial hydrology from airborne radar sounding
1415	15	Riley Culberg	Firn Density in Greenland's Dry Snow Zone from Operation IceBridge Radar Sounding Data
1430	15	Erik Grigsby	High Elevation Crevasses Coincide with Low-permeability Ice Slabs
1445	15	TBD	Discussion

1500–1530	**Break**

1530–1700		**Afternoon session #2: New discoveries, capabilities and projections**	
1530	15	Michael Studinger	New Capabilities and Opportunities with the Airborne Topographic Mapper (ATM): Building on 26 years of Polar Ice Mapping
1545	15	John Ryan	How much snow falls in the ablation zone of the Greenland Ice Sheet?
1600	15	Kyle Mattingly	Evaporative moisture sources contributing to summer and winter atmospheric river events over the Greenland Ice Sheet
1615	15	Sophie Nowicki	The future sea-level contribution of the Greenland ice sheet: a multi-model ensemble study of ISMIP6
1630	15	Denis Felikson	Calibrating Greenland's future contribution to sea-level rise using NASA satellite observations
1645	15	TBD	Discussion

1700–1730	**Break**

1730–1930	**Poster session**
Presenter	*Title*
Patrick Alexander	Capturing Greenland ice sheet sub-grid-scale albedo variability in the NASA GISS ModelE GCM: Impact on simulated surface mass balance
Lauren Andrews	Modeling moulin evolution on the Greenland Ice Sheet
Raf Antwerpen	An analysis of the Greenland Ice Sheet bare ice extent and albedo using MAR and MODIS

Andy Aschwanden	Reducing uncertainties in sea level projections using statistical emulators
Paolo Colosio	Surface melting trends analysis of the Greenland ice sheet from enhanced resolution passive microwave brightness temperatures
Rajashree (Tri) Datta	Estimating Meltwater Volume over Western Greenland During the 2019 Melt Season, Using a Fusion of ICESat-2, Planet SkySat and MAR Model Outputs
Indrani Das	Evolving Centennial-Scale Snow Accumulation Rates Across Greenland from Operation IceBridge Accumulation Radar
William Durkin	Seasonal Elevation Timeseries of Alaskan Glaciers Constructed from ArcticDEM
Elizabeth Fischer	An Energy-Conserving Coupling of Atmosphere and Ice Sheets: Challenges and Perspectives
Sophie Goliber	Characterizing buoyant conditions in West Greenland glaciers
Joel Johnson	Remote Sensing of Sea Ice Thickness and Ice Sheet Internal Temperatures Using Ultra-Wideband Microwave Radiometry
YoungHyun Koo	Spatial Representativeness of ICESat-2 Freeboard Products in Canadian Arctic Area
Sasha Leidman	Deposition of Low Albedo Sediment in Supraglacial Streams Depends on Cyanobacteria
Brooke Medley	Firn air volume loss due to extreme melt events over Greenland
Sierra Melton	Meltwater Plumes and Iceberg Calving at Helheim Glacier, Visualized in High-Resolution Satellite Imagery
Bailey Miller	Multipass SAR Processing for Radar Depth Sounder Clutter Suppression, Tomographic Processing, and Displacement Measurements
Theresa Moore	Array Manifold Calibration for Multichannel Ice Penetrating SARs
Chelsea Parker	Metrics for improved reanalyses in polar regions
Lincoln Pitcher	Direct measurements of ice sheet meltwater runoff in Inglefield Land, northwest Greenland
David Porter	The new snow surface model MAR-L shows the firn evolution response to changing atmospheric conditions over Greenland
Ziad Rashed	Influence of Melange on Tidewater Glacier Calving Activity
Soroush Rezvanbehbahani	Spatio-temporal changes in freshwater budget in Sermilik fjord from high resolution imagery
Christopher Shuman	Landsat Shows Decades of Change in East Greenland
Tasha Snow	What lies beneath: subsurface Atlantic Water variability near Helheim Glacier from a new sea surface temperature-derived proxy
Marco Tedesco	The exceptional 2019 melting season over the Greenland ice sheet: drivers and implications

Kirsty Tinto	Bathymetry of Northeast Greenland from aerogravity
Leung Tsang	A combined active and passive method for the remote sensing of ice sheet temperature profiles
Shujie Wang	Automatic detection of ice surface depression features using ICESat-2 altimetry measurements
Dong L. Wu	A Quasi 4-Year Oscillation in Arctic Spring-Summer TOA Radiation
Haokui Xu	A combined active and passive method for the remote sensing of ice sheet temperature profiles
Bidhyananda Yadav	An open-source Python toolbox for the analysis of ICESat-2 data: Case studies from Alaska, Greenland, and Antarctica

1800–2100	**Evening gathering**